CLAIMS

What is claimed is:

1.   A method comprising:

configuring a central processing unit (CPU) to notify an information collection

module (ICM) when a branch is taken;

recording a branch address when the ICM is notified of a branch taken; and

storing the recorded branch addresses to determine code coverage of a target

program.

2.   The method of claim 1, wherein storing the recorded branch addresses

comprises storing the recorded branch addresses in a buffer.

3.   The method of claim 1, further comprising providing the recorded branch

addresses to a coverage pattern generation module (CPGM) to interpret and display code

coverage statistics.

4.   The method of claim 1, wherein the target program is to be run in a virtual

machine.

5.   The method of claim 4, wherein the information collection module is part

of a virtual machine monitor that is coupled to the virtual machine to collect code

coverage information about the target program.

6.   The method of claim 1, wherein configuring a CPU to notify an

information collection module when a branch is taken comprises configuring a CPU to

notify an information collection module via an interruption when a branch is taken.

7.   An apparatus comprising:

a virtual machine (VM) on which a target program is to execute; and

a virtual machine monitor (VMM) coupled to the virtual machine to gather code

coverage information about the target program, the VMM including an information

collection module (ICM) to configure a central processing unit (CPU) to notify the ICM

when a branch is taken and to record a branch address when a branch is taken.

8.   The apparatus of claim 7, wherein the VMM further comprises a buffer to

store the branch address recorded by the information collection module.

9.   The apparatus of claim 7, wherein the CPU notifies the information

collection module of a branch taken via an interruption.

10.   The apparatus of claim 7, further comprising a coverage pattern generation

module (CPGM) coupled to the VMM to interpret the branch addresses and a source file

of the target program and to display code coverage statistics about the target program.

11.   An article of manufacture comprising:

a machine accessible medium including content that when accessed by a machine causes the machine to perform operations comprising:

configuring a central processing unit (CPU) to notify an information collection module (ICM) when a branch is taken;

recording a branch address when the information collection module is notified of a branch taken; and

storing the recorded branch addresses to determine code coverage of a target program.

12. The article of manufacture of claim 11, wherein the machine-accessible medium further includes content that causes the machine to perform operations comprising providing the recorded branch addresses to a coverage pattern generation module (CPGM) to interpret and display code coverage statistics.

13. The article of manufacture of claim 11, wherein storing the recorded branch addresses comprises storing the recorded branch addresses in a buffer.

14. The article of manufacture of claim 11, wherein the machine-accessible medium further includes content that causes the machine to perform operations comprising running the target program in a virtual machine.

15.   The article of manufacture of claim 14, wherein the information collection module is part of a virtual machine monitor that is coupled to the virtual machine to collect code coverage information about the target program.

16.   The article of manufacture of claim 11, wherein configuring a CPU to notify an information collection module when a branch is taken comprises configuring a CPU to notify an information collection module via an interruption wherever a branch is taken.

17.   A system comprising:

a processor;

a network interface coupled to the processor; and

a machine accessible medium including content that when accessed by a machine causes the machine to perform operations including:

configuring a central processing unit (CPU) to notify an information collection module (ICM) when a branch is taken;

recording a branch address when the information collection module is notified of a branch taken; and

storing the recorded branch addresses to determine code coverage of a target program.

18.   The system of claim 17, wherein the machine-accessible medium further includes content that causes the machine to perform operations comprising providing the

recorded branch addresses to a coverage pattern generation module (CPGM) to interpret and display code coverage statistics.

19.   The system of claim 17, wherein the target program is to be run on a virtual machine.

20.   The system of claim 17, wherein the information collection module is part of a virtual machine monitor that is coupled to the virtual machine to collect code coverage information about the target program.